

Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

EBRINGER, ALAN

Atty. Docket: 78104040

Title:

DIAGNOSIS OF DEMYELINATING OR SPONGIFORM

DISEASE

FULL SET OF "CLEAN" CLAIMS AS AMENDED, 37 CFR § 1.121(c)(3)

1. A method for diagnosing spongiform disease or demyelinating disease in vertebrates, including BSE, MS and CJD, which comprises assaying a biological sample for antibodies which bind to myelin and/or neurofilaments or to one or more antigenic (immunogenic) parts thereof.

- 2. A method according to claim 1, in which the antibodies are IgA antibodies.
- 3. A method according to claim 1, in which the assay is for antibodies that bind to vertebrate myelin and/or neurofilaments or parts thereof.
- 4. A method according to claim 3, in which the vertebrate is bovine or human.

[AMENDED] A method according to claim 4, in which the test antigen is a peptide selected from the group consisting of peptides having sequences identified as Sequence ID Nos. 1 to 7 hereinbefore specified.

[AMENDED] A method according to claim 1, in which a positive result is indicated by levels of antibodies at least about two standard deviations above that of control samples.

[AMENDED] A method according to any of the preceding claims combined with an assay for antibodies to *Acinetobacter* species.

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- 8. A diagnostic kit for the detection of spongiform disease or demyelinating disease in vertebrates comprising, as test antigen, myelin and/or neurofilaments and/or one or more parts thereof.
- 9. [AMENDED] A diagnostic kit according to claim 8, in which the test antigen is a peptide having a sequence selected from the group consisting of Sequence ID Nos. 1 to 7 specified herein before.
- 10. A diagnostic kit according to claim 8, containing as test antigens myelin, neurofilaments, and Acinetobacter calcoaceticus.



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"MARKED UP" PARAGRAPHS AS AMENDED, 37 CFR § 1.121(b)(1)(iii)

In the paragraph beginning at page 2, line 26:

The test antigen used in the above defined method and diagnostic kit may be a peptide component of the myelin or neurofilaments, such as one of the following peptides having Sequence ID Nos 1-7, namely,

1. NEALEK (SEQ. ID. NO: 1) 2. LKKVHEE (SEQ. ID. NO: 2)

3. EALEKQL (SEQ. ID. NO: 3) 4. ELEDKQN (SEQ. ID. NO: 4)

[2. EALEKQL]

[6]5. KKVHEE (SEQ. ID. NO: 5)

[7]6. EIRDLR (SEQ. ID. NO: 6) [8]7. EQEIRDLR (SEQ. ID. NO: 7)

The above sequences have been retrieved from the Protein Information Resource database release 44.



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"MARKED UP" CLAIMS AS AMENDED, 37 CFR §1.121(c)(1)(ii)

- 5. [AMENDED] A method according to claim 4, in which the test antigen is a peptide selected from the group consisting of peptides having sequences identified as Sequence ID Nos. 1 to [8]7 hereinbefore specified.
- 6. [AMENDED] A method according to [any of claims] claim 1, in which a positive result is indicated by levels of antibodies at least about two standard deviations above that of control samples.
- 7. [AMENDED] A method according to any of the preceding claims combined with an assay an assay for antibodies to [Acinetobacter] <u>Acinetobacter</u> species.
- 9. [AMENDED] A diagnostic kit according to claim 8, in which the test antigen is a peptide having a sequence selected from the group consisting of Sequence ID Nos. 1 to [8]7 specified hereinbefore.